I. GENERAL

This project involves the installation of a new Traffic Control Signal with interconnect at the intersection of MD 378 (Baltimore Avenue) and 2nd Street in Worcester County. MD 378 (Baltimore Avenue) is assumed to run in a north-south direction.

II. INTERSECTION OPERATION

- 1. The intersection is to operate in a NEMA three-phase, fixed time mode, with the northbound MD 378 (Baltimore Avenue) approach running alone. The pedestrian phase across the south leg of MD 378 (Baltimore Avenue) shall be on recall. The 2nd Street approaches shall run concurrently.
- 2. A full-traffic-actuated, eight-phase controller with all necessary equipment housed in a NEMA size "5" pole-mounted cabinet shall be installed at this intersection.

III. SPECIAL NOTES

- The Contractor shall be responsible for terminating all signal cables, excluding interconnect, to the appropriate terminals and shall properly label each cable.
- 2. All controller cabinet wiring will be performed by the S.H.A. Signal Shop Contact Mr. Ed Rodenhizer at (410) 787-7650 seventy-two hours in advance of intended work.
- 3. All underground and overhead utilities shown on these plans are schematic only and may not be complete. The Contractor shall be responsible for notifying Miss Utility prior to construction so that all utilities may be located in the field. If the Contractor perceives that a conflict between the utilities and the traffic signal will occur, the Contractor shall notify the Project Engineer immediately so that the conflict may be resolved.

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY S.H.A..

| ITEM NO. | DESCRIPTION | QUAN | TIT |
|-------------|---|------|-----|
| 9042 | Controller ASC II with telemetry | 1 | EΑ |
| 9043 | Controller cabinet, size "5" | 1 | EA |
| 9571 | Sheet aluminum signs to consist of: (mast arm or pole mount) | 38 | SF |
| | D3-2 "Baltimore AVE " sign, (variable x 16") mast arm mounted. | 2 | EA |
| | D3-2 "2ND Street " sign, (variable x 16") mast arm mounted. | 1 | EA |
| | R3-2 "No Left Turn (Symbolic)" sign, (30" x30") R3-1 "No Right Turn (Symbolic)" sign, (30" x30") (dual faced) mast arm mounted. | 1 | EA |

EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

| ITEM NO. | DESCRIPTION | QUAN | NTITY |
|-------------|--|------|-------|
| 1001 | Maintenance of traffic per assignment. | 2 | EA |
| 2001 | Class 2 Excavation. | 3.5 | C.Y. |
| 2002 | Test Pit Excavation | 2 | C.Y. |
| 5005 | 24" white heat applied permanent preformed thermoplastic pavement marking. | 60 | L.F. |
| 5008 | Remove existing pavement markings — any width. | 60 | L.F. |
| 6004 | 4" concrete sidewalk. | 260 | S.F. |
| 8006 | Cut. clean. galvanize and cap traffic signal structure. | 1 | EA |
| 8010 | Furnish and install 12" | 8 | ΕA |

pedestrian signal head section

| В. | EQUIPMENT TO BE FURNISHED AND/OR | INSTA | LLED BY | THE | CONTRA | CTOR |
|-------------|--|-------|---------|-----|--------|------|
| ITEM NO. | DESCRIPTION | QUAN | TITY | | | |
| 8011 | Furnish and install 12" vehicular traffic signal head section | 18 | EA | | | |
| 8015 | Furnish and install 3" weatherhead. | 1 | EA | | | |
| 8020 | Furnish and install control and distribution equipment (120/240 V, 1 phase 3 wire system). | 1 | EA | | | |
| 8023 | Furnish and install 27' mast arm pole and 60' mast arm. | 1 | EA | | | |
| 8030 | Furnish and install breakaway pedestal pole (10'). | 1 | EA | | | |
| 8048 | Remove and dispose of existing material and equipment per assignment. | 1 | EA | | | |
| 8051 | Furnish and install 3" schedule 80 rigid polyvinyl chloride conduit – trenched | 55 | L.F. | | | |
| 8053 | Furnish and install 4" schedule 80 rigid polyvinyl chloride conduit – trenched. | 30 | L.F. | | | |
| 8054 | Furnish and install 12-pair communication cable, self-supporting (overhead). | 1120 | L.F. | | | |
| 8057 | Furnish and install concrete for signal foundation. | 6 | C.Y. | | | |
| 8060 | Furnish and install No. 6 AWG stranded bare copper ground wire. | 225 | L.F. | | | |
| 8067 | Furnish and install 4" schedule 80 rigid polyvinyl chloride conduit – slotted. | 80 | L.F. | | | |
| 8072 | Furnish and install electrical handhole. | 3 | EA | | | |
| 8075 | Install overhead sign. | 38 | S.F. | | | |
| 0808 | Furnish and install ground rod $-\frac{3}{4}'' \times 10'$. | 3 | EA | | | |
| 8084 | Furnish and install electrical cable – 5 conductor (No. 14 AWG). | 340 | L.F. | | | |
| 8085 | Furnish and install electrical cable – 7 conductor (No. 14 AWG). | 260 | L.F. | | | |
| 8092 | Install controller and cabinet pole mount. | 1 | EA | | | |
| Neg. | Furnish and install 3" electrical conduit - polyvinyl chloride riser. | 20 | L.F. | | | |
| Neg. | Pedestrian education R10-4(1) sign. (Top portion to be left blank). | 2 | EA | | | |
| Neg. | Remove and replace brick sidewalk. | 10 | S.F. | | | |
| Neg. | Cut, pull back and reroute 12-pair interconnect cable | 70 | L.F. | | | |

EQUIPMENT TO BE REMOVED

All removed signal materials are to become property of the contractor.

The contact persons for District #1 are as follows:

Mr. Gene Cofiell Assistant District Engineer – Traffic Phone: (410) 677–4040

Mr. Jimmy Wright Assistant District Engineer – Maintenance Phone: (410) 543–6715 Mr. Bruce Poole Assistant District Engineer – Utility Phone: (410) 677–4082

Mr. Richard L. Daff, Sr. Chief, Traffic Operations Division Phone: (410) 787–7630

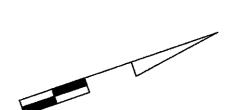
Electrical Service Representative:

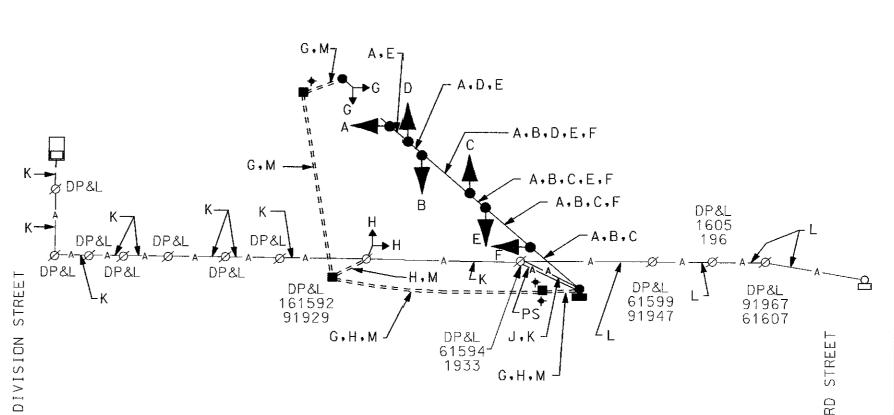
Connectiv
2530 N. Salisbury Blvd.
Salisbury Maryland 21802
ATTN: Mr. Rodney Bain
(410) 860-6242

PHASE CHART

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
|-----------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--------------|---------|-------|----------|--------------|
| | (R) (Y) (G) | (R) (Y) (G) | (R) (Y) (G) | (R) (Y) (G) | (R) (Y) (G) | (R) (Y) (G) | 子 | | P. 头 | 5 | |
| PHASE 6 | G | G | R | R | R | R | DW | DW | WK | MK T | |
| PED CLEARANCE | G | G | R | R | R | R | DW | DW | FL/DW | FL/DW | • |
| 6 CHANGE | Y | Y | R | R | R | R | DW | DW | DW | DW • | → |
| PHASE 4 & 8 | R | R | G | G | G | G | WK | WK | DW | DW - | . |
| PED CLEARANCE | R | R | G | G | G | G | FL/DW | FL/DW | DW | DW I | |
| 4 & 8 CHANGE | R | R | Υ | Y | Y | Y | DW | DW | DW | DW - | 1 |
| FLASHING OPERATION | FL/Y | FL/Y | FL/R | FL/R | FL/R | FL/R | DARK | DARK | DARK | DARK | |

WIRING DIAGRAM

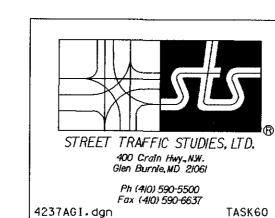


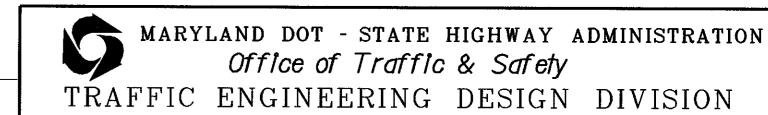


A 7-CONDUCTOR ELECTRICAL C C CABLE (NO. 14 A.W.G) D E F CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G)

- J REROUTED 12-PAIR VOICE GRADE INTERCONNECT CABLE (SELF SUPPORTING)
- K 12-PAIR VOICE GRADE INTERCONNECT CABLE (SELF SUPPORTING)
- L EXISTING 12-PAIR VOICE GRADE INTERCONNECT CABLE (SELF SUPPORTING)
- M STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
- PS-PROPOSED OVERHEAD ELECTRICAL SERVICE TO BE INSTALLED BY CONECTIV

 TO GROUND ROD





MD 378 (BALTIMORE AVE) AND 2nd ST.

| ALE: NONE COUNTY: WORCESTER T.I.M.S. NO. 2 OF 2 | AWN BY: ROB CICCHINI CKED BY: RR ZACHERL | F.A.P. NO. S.H.A. NO. | W0501A54 | TS NO. 4200 | SHEET NO. |
|---|--|--------------------------|-----------------------|-----------------------------|-------------------|
| | | COUNTY: Log mile: | WORCESTER 23037800.54 | T.I.M.S. NO. F358 | 2 _{OF} 2 |